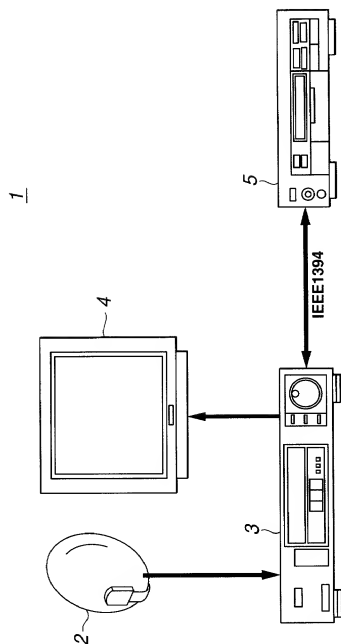
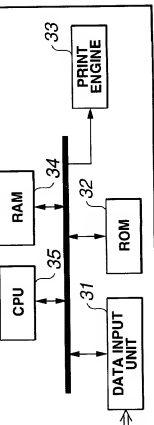


FIG.1

FIG.2





4/25

100

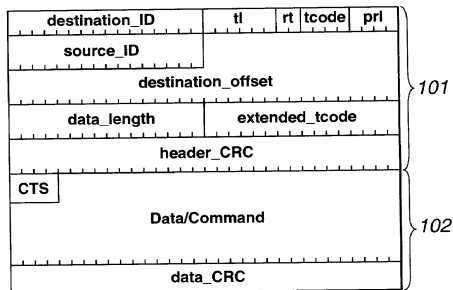


FIG.4

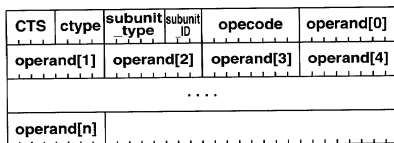


FIG.5

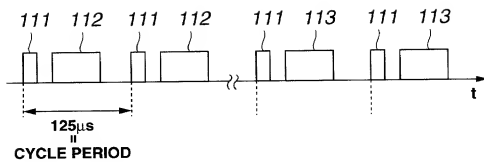


FIG.6

6/25

	pixel_x	pixel_y	interlaced/ progressive	pixel format	screen aspect ratio	pixel aspect ratio	based standard	image size
1080_422_16×9	1920	1080	interlaced/ progressive	YCbCr 4:2:2	16:9	1:1	ITU-R BT. 709-2	3.96MB
1080_420_16×9	1920	1080	interlaced/ progressive	YCbCr 4:2:0	16:9	1:1	ITU-R BT. 709-2	2.97MB
720_422_16×9	1280	720	progressive	YCbCr 4:2:2	16:9	1:1	ANSI/SMP TE 296 M-1997	1.76MB
720_420_16×9	1280	720	progressive	YCbCr 4:2:0	16:9	1:1	ANSI/SMP TE 296 M-1997	1.32MB
576_422_4×3	720	576	interlaced/ progressive	YCbCr 4:2:2	4:3	1.07:1	ITU-R BT.1203	810KB
576_420_4×3	720	576	interlaced/ progressive	YCbCr 4:2:0	4:3	1.07:1	ITU-R BT.1203	608KB
480_422_16×9	720	480	interlaced/ progressive	YCbCr 4:2:2	16:9	1.19:1	ITU-R BT. 709-2	675KB
480_420_16×9	720	480	interlaced/ progressive	YCbCr 4:2:0	16:9	1.19:1	ITU-R BT. 709-2	506KB
480_422_4×3	720	480	interlaced/ progressive	YCbCr 4:2:2	4:3	0.89:1	ITU-R BT.601-4	575KB
480_420_4×3	720	480	interlaced/ progressive	YCbCr 4:2:0	4:3	0.89:1	ITU-R BT.601-4	506KB

FIG.7

7/25

	msb							lsb
opcode	VERSION(44 <sub>16</sub> )							
operand [0]	reserved							
operand [1]	printer subunit version							
operand [2]	implementation profile id							
operand [3]	reserved							
operand [4]								

FIG.8

8/25

printer_subunit_version	Meaning
10 <sub>16</sub>	Version 1.0 of the printer subunit specification
all others	Reserved for future specification.

FIG.9



9/25

implementation_profile_id	Meaning
00 <sub>16</sub>	Minimum
01 <sub>16</sub>	DSC
02 <sub>16</sub>	DTV
03 <sub>16</sub>	DSC&DTV

FIG.10

	sRGB	YCC4:2:2 raw/chunky/ progressive	YCC4:2:0 raw/chunky/ progressive	Exit2.1	Unit Plug Defined(DV)	Unit Plug Defined (MPEG2-TS)
640 × 480	△ ○ ☆ ◎			☆ ◎		
720 × 480		○ ◎	○ ◎			
720 × 576		○ ◎	○ ◎			
800 × 600	☆ ◎			☆ ◎		
1024 × 768	☆ ◎			☆ ◎		
1280 × 960	☆ ◎			☆ ◎		
1280 × 720		○ ◎	○ ◎			
1600 × 1200						
1920 × 1080		○ ◎	○ ◎			

△ : Minimum ☆ : DSC ○ : DTV ◎ : DSC&DTV

FIG.11

11/25

	msb						lsb
opcode	CAPTURE(42 <sub>16</sub> )						
operand [0]	subfunction						
operand [1]	source_subunit_type					source_subunit_ID	
operand [2]	source_plug						
operand [3]	status						
operand [4]	dest_plug						
operand [5]	print_job_ID						
:							
operand [16]	data_size						
operand [17]							
operand [18]							
operand [19]							
operand [20]							
operand [21]	image_size_x						
operand [22]							
operand [23]	image_size_y						
operand [24]							
operand [25]	image_format_specifier						
operand [26]							
operand [27]	reserved						
operand [28]							
operand [29]							
operand [30]	next_pic						
operand [31]	next_page						
operand [32]							

FIG.12

12/25

Value	Symbol	Meaning
01 <sub>16</sub>	get	Get the current operation modes
02 <sub>16</sub>	get	Set the specified operation modes
03 <sub>16</sub>	query	Get the supported operation modes
Other values	—	Reserved

FIG.13

13/25

value	Type	Meaning
20 <sub>16</sub>	1080i _ 422chunky _ 16 × 9	
21 <sub>16</sub>	1080p _ 422chunky _ 16 × 9	
22 <sub>16</sub>	720p _ 422chunky _ 16 × 9	
23 <sub>16</sub>	480i _ 422chunky _ 16 × 9	
24 <sub>16</sub>	480p _ 422chunky _ 16 × 9	
25 <sub>16</sub>	480i _ 422chunky _ 4 × 3	
26 <sub>16</sub>	480p _ 422chunky _ 4 × 3	
28 <sub>16</sub>	1080i _ 422liner _ 16 × 9	
29 <sub>16</sub>	1080p _ 422liner _ 16 × 9	
2A <sub>16</sub>	720p _ 422liner _ 16 × 9	
2B <sub>16</sub>	480i _ 422liner _ 16 × 9	
2C <sub>16</sub>	480p _ 422liner _ 16 × 9	
2D <sub>16</sub>	480i _ 422liner _ 4 × 3	
2E <sub>16</sub>	480p _ 422liner _ 4 × 3	
30 <sub>16</sub>	1080i _ 420planer _ 16 × 9	
31 <sub>16</sub>	1080p _ 420planer _ 16 × 9	
32 <sub>16</sub>	720p _ 420planer _ 16 × 9	
33 <sub>16</sub>	480i _ 420planer _ 16 × 9	
34 <sub>16</sub>	480p _ 420planer _ 16 × 9	
35 <sub>16</sub>	480i _ 420planer _ 4 × 3	
36 <sub>16</sub>	480p _ 420planer _ 4 × 3	
38 <sub>16</sub>	1080i _ 420liner _ 16 × 9	
39 <sub>16</sub>	1080p _ 420liner _ 16 × 9	
3A <sub>16</sub>	720p _ 420liner _ 16 × 9	
3B <sub>16</sub>	480i _ 420liner _ 16 × 9	
3C <sub>16</sub>	480p _ 420liner _ 16 × 9	
3D <sub>16</sub>	480i _ 420liner _ 4 × 3	
3E <sub>16</sub>	480p _ 420liner _ 4 × 3	
60 <sub>16</sub>	Text(ASCII)	MD-clip ASCII
61 <sub>16</sub>	Text(ISO8859-1)	MD-clip modified ISO8859-1
62 <sub>16</sub>	Text(Music Shifted JIS)	MD-clip Music Shifted JIS

FIG.14

Value(MSB)	Value(LSB)	Type	Meaning
00 <sub>16</sub>			
	00 <sub>16</sub>	sRGB raw	sRGB raw
	01 <sub>16</sub>	sRGB raw,quadlet	
01 <sub>16</sub>			YCC raw
	0X <sub>16</sub>	YCC4:2:2 raw/pixel	
	1X <sub>16</sub>	YCC4:2:2 raw/line	
	8X <sub>16</sub>	YCC4:2:0 raw/pixel	
	9X <sub>16</sub>	YCC4:2:0 raw/line	
	X0 <sub>16</sub>	Pixel ratio 1.00 × 1.00 / ITU-R BT.709-2 / interface	
	X1 <sub>16</sub>	Pixel ratio 1.19 × 1.00 / ITU-R BT.709-2 / interface	
	X2 <sub>16</sub>	Pixel ratio 0.89 × 1.00 / ITU-R BT.709-2 / interface	
	X3 <sub>16</sub>	Pixel ratio 0.89 × 1.00 / ITU-R BT.601-4 / interface	
	X4 <sub>16</sub>	Pixel ratio 1.07 × 1.00 / ITU-R BT.1203 / interface	
	X8 <sub>16</sub>	Pixel ratio 1.00 × 1.00 / ITU-R BT.709-2 / progressive	
	X9 <sub>16</sub>	Pixel ratio 1.19 × 1.00 / ITU-R BT.709-2 / progressive	
	XA <sub>16</sub>	Pixel ratio 0.89 × 1.00 / ITU-R BT.709-2 / progressive	
	XB <sub>16</sub>	Pixel ratio 0.89 × 1.00 / ITU-R BT.601-4 / progressive	
	XC <sub>16</sub>	Pixel ratio 1.07 × 1.00 / ITU-R BT.1203 / progressive	
10 <sub>16</sub>			DCF Object
	00 <sub>16</sub>	Exif 2.1	
	01 <sub>16</sub>	JFIF	
	02 <sub>16</sub>	TIFF	
	0F <sub>16</sub>	JPEG	
80 <sub>16</sub> ~8F <sub>16</sub>	00 <sub>16</sub> ~FF <sub>16</sub>	Vendor Dependent format	
FE <sub>16</sub>			Special meaning
	00 <sub>16</sub>	Unit Plug defined	
	01 <sub>16</sub>	don't care	

FIG.15

$Y_1(L_1)$	$Y_2(L_1)$	$Cb_1(L_1)$	$Cr_1(L_1)$
$Y_3(L_1)$	$Y_4(L_1)$	$Cb_3(L_1)$	$Cr_3(L_1)$
⋮			
$Y_{N-1}(L_1)$	$Y_N(L_1)$	$Cb_{N-1}(L_1)$	$Cr_{N-1}(L_1)$
$Y_1(L_2)$	$Y_2(L_2)$	$Cb_1(L_2)$	$Cr_1(L_2)$
⋮			
$Y_{N-1}(L_M)$	$Y_N(L_M)$	$Cb_{N-1}(L_M)$	$Cr_{N-1}(L_M)$

FIG.16

$Y_1(L_1)$	$Y_2(L_1)$	$Y_1(L_2)$	$Y_2(L_2)$
$Cb_1(L_1)$	$Cr_1(L_1)$	$Y_3(L_1)$	$Y_4(L_1)$
$Y_3(L_2)$	$Y_4(L_2)$	$Cb_3(L_1)$	$Cr_3(L_1)$
⋮			
$Y_{N-3}(L_{M-1})$	$Y_{N-2}(L_{M-1})$	$Y_{N-3}(L_M)$	$Y_{N-2}(L_M)$
$Cb_{N-3}(L_{M-1})$	$Cr_{N-3}(L_{M-1})$	$Y_{N-1}(L_{M-1})$	$Y_N(L_{M-1})$
$Y_{N-1}(L_M)$	$Y_N(L_M)$	$Cb_{N-1}(L_{M-1})$	$Cr_{N-1}(L_{M-1})$

FIG.17

16/25

$Y_1(L_1)$	$Y_2(L_1)$	$Y_3(L_1)$	$Y_4(L_1)$
$\vdots$			
$Y_{N-3}(L_1)$	$Y_{N-2}(L_1)$	$Y_{N-1}(L_1)$	$Y_N(L_1)$
$Cb_1(L_1)$	$Cr_1(L_1)$	$Cb_3(L_2)$	$Cr_3(L_1)$
$\vdots$			
$Cb_{N-3}(L_M)$	$Cr_{N-3}(L_1)$	$Cb_{N-1}(L_1)$	$Cr_{N-1}(L_1)$
$Y_1(L_2)$	$Y_2(L_2)$	$Y_3(L_1)$	$Y_4(L_1)$
$\vdots$			
$Cb_{N-3}(L_M)$	$Cr_{N-3}(L_M)$	$Cb_{N-1}(L_M)$	$Cr_{N-1}(L_M)$

FIG.18



17/25

$Y_1(L_1)$	$Y_2(L_1)$	$Y_3(L_1)$	$Y_4(L_1)$
$\vdots$			
$Y_{N-3}(L_1)$	$Y_{N-2}(L_1)$	$Y_{N-1}(L_1)$	$Y_N(L_1)$
$Y_1(L_2)$	$Y_2(L_2)$	$Y_3(L_2)$	$Y_4(L_2)$
$\vdots$			
$Y_{N-3}(L_2)$	$Y_{N-2}(L_2)$	$Y_{N-1}(L_2)$	$Y_N(L_2)$
$Cb_1(L_1)$	$Cr_1(L_1)$	$Cb_3(L_1)$	$Cr_3(L_1)$
$\vdots$			
$Cb_{N-3}(L_1)$	$Cr_{N-3}(L_1)$	$Cb_{N-1}(L_1)$	$Cr_{N-1}(L_1)$
$Y_1(L_3)$	$Y_2(L_3)$	$Y_3(L_3)$	$Y_4(L_3)$
$\vdots$			
$Cb_{N-3}(L_{M-1})$	$Cr_{N-3}(L_{M-1})$	$Cb_{N-1}(L_{M-1})$	$Cr_{N-1}(L_{M-1})$

FIG.19

Address Offset	1 <sup>st</sup> byte	2 <sup>nd</sup> byte	3 <sup>rd</sup> byte	4 <sup>th</sup> byte
00 00 00 00 <sub>16</sub>	Y1(L1)	Y2(L1)	Cb1(L1)	Cr1(L1)
00 00 00 04 <sub>16</sub>	Y3(L1)	Y4(L1)	Cb3(L1)	Cr3(L1)
...				
00 00 05 9C <sub>16</sub>	Y719(L1)	Y720(L1)	Cb719(L1)	Cr719(L1)
00 00 05 A0 <sub>16</sub>	Y1(L2)	Y2(L2)	Cb1(L2)	Cr1(L2)
...				
00 0A 8B FC <sub>16</sub>	Y719(L480)	Y720(L480)	Cb719(L480)	Cr719(L480)

FIG.20

Address Offset	1 <sup>st</sup> byte	2 <sup>nd</sup> byte	3 <sup>rd</sup> byte	4 <sup>th</sup> byte
00 00 00 00 <sub>16</sub>	Y1(L1)	Y2(L1)	Y1(L2)	Y2(L2)
00 00 00 04 <sub>16</sub>	Cr1(L1)	Cr1(L1)	Y3(L1)	Y4(L1)
00 00 00 08 <sub>16</sub>	Y3(L2)	Y4(L2)	Cb3(L1)	Cr3(L1)
⋮			⋮	
00 07 E8 F8 <sub>16</sub>	Cb717(L479)	Cr717(L479)	Y719(L479)	Y720(L479)
00 07 E8 FC <sub>16</sub>	Y719(L480)	Y720(L480)	Cb719(L479)	Cr719(L479)

FIG.21

Address Offset	1 <sup>st</sup> byte	2 <sup>nd</sup> byte	3 <sup>rd</sup> byte	4 <sup>th</sup> byte
00 00 00 00 <sub>16</sub>	Y1(L1)	Y2(L1)	Y3(L1)	Y4(L1)
⋮	⋮			
00 00 02 CF <sub>16</sub>	Y717(L1)	Y718(L1)	Y719(L1)	Y720(L1)
00 00 02 D0 <sub>16</sub>	Cb1(L1)	Cr1(L1)	Cb3(L1)	Cr3(L1)
⋮	⋮			
00 00 05 9F <sub>16</sub>	Cb717(L1)	Cr717(L1)	Cb719(L1)	Cr719W(L1)
00 00 05 A0 <sub>16</sub>	Y1(L2)	Y2(L2)	Y3(L2)	Y4(L2)
⋮	⋮			
00 0A 8B FC <sub>16</sub>	Cb717(L480)	Cr717(L480)	Cb719(L480)	Cr719(L480)

FIG.22

Address Offset	1 <sup>st</sup> byte	2 <sup>nd</sup> byte	3 <sup>rd</sup> byte	4 <sup>th</sup> byte
00 00 00 00 <sub>16</sub>	Y1(L1)	Y2(L1)	Y3(L1)	Y4(L1)
⋮				
00 00 02 CF <sub>16</sub>	Y717(L1)	Y718(L1)	Y719(L1)	Y720(L1)
00 00 02 D0 <sub>16</sub>	Y1(L2)	Y2(L2)	Y3(L2)	Y4(L2)
⋮				
00 00 05 9F <sub>16</sub>	Y717(L2)	Y718(L2)	Y719(L2)	Y720(L2)
00 00 05 A0 <sub>16</sub>	Cb1(L1)	Cr1(L1)	Cb3(L1)	Cr3(L1)
⋮				
00 00 08 6F <sub>16</sub>	Cb717(L1)	Cr717(L1)	Cb719(L1)	Cr719(L1)
00 00 08 70 <sub>16</sub>	Y1(L3)	Y2(L3)	Y3(L3)	Y4(L3)
⋮				
00 07 E8 FC <sub>16</sub>	Cb717(L479)	Cr717(L479)	Cb719(L479)	Cr719(L479)

FIG.23

22/25

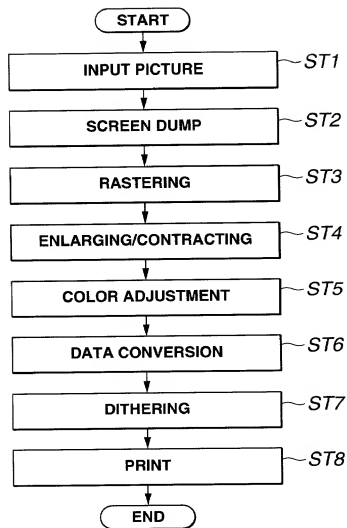


FIG.24

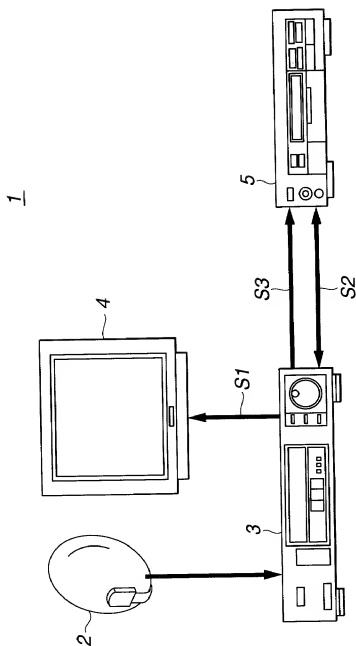


FIG.25

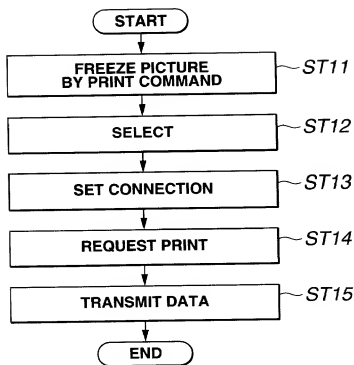


FIG.26



25/25

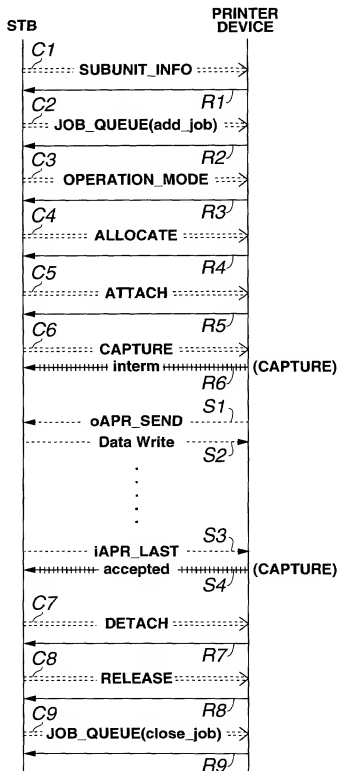


FIG.27